

## Business case Slovenia



<b>Partner</b>	ELPRO Lepenik, Slovenia
<b>Customer</b>	MLM
<b>Industry</b>	Metal, cast of aluminium
<b>Application</b>	Control of the breakthrough of the aluminum melt
<b>Used transmitter</b>	IPAQ-R520, IPAQ-C520, IPAQ-R530 and IPAQ-C530

### Description

Control of the breakthrough of the aluminum melt through the graphite protective tube to the thermocouple

Customers problem:

Aluminium melts are very aggressive, the lifetime of a graphite protective tube is max 30-45 days if no mechanical damage occurs earlier. When the melt breaks through the graphite protective tube, the thermocouple is exposed to the melt and it fails within a few hours. In the meantime, incorrect measurements occur, mostly the thermocouple shows the temperature that is too low. The temperature of the melt rises, which stops the work process and the melt is not suitable for processing anymore. Such stoppages and damage to the melt are very expensive and time-consuming.



ALUMINUM DIE-CASTINGS

Aluminium die casting MLM

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### Description cont.

ELPRO Lepnik solution:

We have made control cabinets that contain the IPAQ 520/ IPAQ 530, a digital display and a signal light with a siren. The equipment detects the breakdown of the melt and signals the failure of the thermocouple. They replace the thermocouple and continue to work, without downtime and without further damage.



Prototype version from ELPRO Lepnik